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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/721,609

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EXAMINER

NGAMPA, BRIGET P

ART UNIT

PAPER NUMBER

1792

MAIL DATE

DELIVERY MODE

11/13/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/721,609

Applicant(s)

NISHIGUCHI ET AL.

Examiner

Briget P. Ngampa

Art Unit

1792

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>2/9/07, 12/14/05</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ishikawa et al. (Pub No. 2002/0001026 A1, hereafter '026) in view of Hidejiro (patent abstract of Japan number 2000-289320, hereafter '320).

With respect to claim 1, '026 teach a method of producing an organic electroluminescence device comprising a pair of electrodes [0013], layers of organic material disposed between the electrodes so as to cause luminescence between the electrodes [0013];

'026 further teach that in each ink application, the ink (formed by dissolving an organic EL material with hydrophobic solvent [0037] was placed and filled into an intaglio plate [fig 4A, 402] and a silicone rubber blanket [fig 4A, 407] was pressed onto the plate [fig 4A, 402] giving a blanket pressing depth to receive an ink pattern [fig 4A, 408]. Thereafter, the ink pattern [fig 4A, 408] was transfer as an ink pattern [fig 4B, 412] on a substrate [411]; [0050]. '026 does not teach that the ink is supplied and applied from the lower side.

'320 teach that the coating liquid [drawing 3, 10] (ink) is supplied and applied to the surface of the silicone blanket [9] from the lower side [drawing 3, 10/17] via a

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gravure roll provided with a gravure pattern [3/5]. Also, letterpress (i.e. relief printing plate) may be used instead of the intaglio plate [0007]. It would have been obvious to one of ordinary skill in the art at the time of the invention to have supplied and applied the intaglio printing process of '320 to print the EL layers of '026 because '320 teach that it is a suitable method of making pixels of electronic devices.

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ishikawa et al. (Pub No. 2002/0001026 A1, hereafter '026) in view of Hidejiro (patent abstract of Japan number 2000-289320, hereafter '320) and further in view of Johnson (patent number 5,540,147, hereafter '147).

With respect to claim 2, '026 and '320 teach the limitations of claim 1 but they do not teach a gravure roll which is tapered at both end portions, so that the tapered portions correspond to non-pixel-forming areas on both sides of an effective pixel forming area of the silicone blanket.

'147 show on figure 5A, 72 that the edges of the collector rolls [fig 5A, 16] are tapered [72] at both end and they are masked to protect the tapered edges from being cured during the transfer of the black matrix pattern to the transfer layer [col 9, lines 10-14]. It would have been obvious to one of ordinary skill in the art at the time of the invention to have used the tapered rolls of '147 to apply the ink of '026 and '320 to control the application of the ink because '147 teaches that it is a suitable method.

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4. Claim 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishikawa et al. (Pub No. 2002/0001026 A1, hereafter '026) in view of Hidejiro (patent abstract of Japan number 2000-289320, hereafter '320).

All the limitations of claim 3 have been treated above in claim 1 by '026 and 320; except the coating liquid is supplied and applied via a slit provided in parallel to the rotational axis of the silicone blanket. '320 further teaches that the coating liquid [drawing 3, 10] (ink) is supplied and applied to the surface of the silicone blanket [9] from the lower side [drawing 3, 10/17] via a gap (slit) [drawing 2, 15].

With respect to claims 4 and 5, '026 and '320 teach the limitations of claim 3, and '320 further teach the slit is formed by opposing two flat plates to each other with a spacing there between (gap 15), and totally closing gaps between left and right end portions of said flat plates (drawing 2b, 12/13), the spacing between said surface of said silicone blanket and top faces of said two flat plates is uniform at a slit portion corresponding to an effective pixel forming area of said silicone blanket (drawing 2b, 14/15), whereas said top faces of said two flat plates are slant surfaces with a downward gradient from the central portion side toward end portion sides of the rotational axis of said silicone blanket at slit portions corresponding to non-pixel- forming areas present on both sides of said effective pixel forming area of said silicone blanket (drawing 2b, 14), and said coating liquid is supplied and applied to said surface of said silicone blanket from the lower side thereof via said slit (drawing 2b, 15). It would have been obvious to one of ordinary skill in the art at the time the invention was made to

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have supplied and applied the ink trough the slit of '320 to print the ink of '026 because '320 teaches that it is a suitable method for supplying and applying ink to a substrate.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Briget P. Ngampa whose telephone number is 571-270-1866. The examiner can normally be reached on M-F, 9:30-5:30PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Cleveland can be reached on 571-272-1418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

bpn


FRED J. PARKER
PRIMARY EXAMINER